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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,209	01/20/2004	Young-Soo Han	CHAES7.003AUS	2517

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EXAMINER

JACKSON, ANDRE L

ART UNIT PAPER NUMBER

3677

DATE MAILED: 02/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/762,209

Applicant(s)

HAN ET AL.

Examiner

Andre' L. Jackson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 6, 7 and 9-20 is/are rejected.
- 7) ☒ Claim(s) 3, 5, 8, 21 and 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/3/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### Claim Objections

Claim 11 is objected to because of the following informalities: In lines 5 and 7, change “rotates” to read -- rotate --. Appropriate correction is required.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 6, 7 and 9-20 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 6, 009,568 to Miyazaki. Miyazaki discloses a hinge apparatus for coupling a first unit rotatable about a first axis and a second unit rotatable about a second axis parallel with the first rotation axis, the hinge apparatus comprising;

a housing (2); a first rotating member (3) adapted to be coupled to the first unit (19) and rotatable about the first rotation axis with respect to the housing; a second rotating member (4) adapted to be coupled to the second unit (20) and rotatable about the second rotation axis with respect to the housing; a first linearly moving member (12) cooperating with the first rotating member and linearly movable with respect the housing; a second linearly moving member (12) cooperating with the second rotating member and linearly movable with respect the housing; a first resilient member (13) urging the first linearly moving member against the first rotating member; and a second resilient member (13) urging the second linearly moving member against the second rotating member.

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As to claims 2, 4, 9, 10, 18 and 19, the first and second rotating member are engagedly rotated with the first unit and second unit respectively, while the first and second linearly moving members are engagedly moved during rotation of the first and second rotating members respectively.

As to claims 6, 7 and 11-15, the first and second rotating members each include a cam member (10) and the first and second linearly moving members each include a cam follower member (12b) cooperating with the respective cam member of the rotating members. The respective cam members include upward and downward slant surfaces as seen in Fig. 10. The cam member further defines a fixing groove (11b) into which a respective cam follower member is inserted thereto. As seen in Fig. 11, at a foot of the fixing groove a horizontal surface is contiguous at the fixing groove, wherein stoppers (11a) having grooves at both ends of the cam member prevent movement of a respective cam follower member out of engagement thereof.

As to claims 16, 17 and 20, Miyazaki discloses that the first and second rotating members define protrusion portions or rod ends (3c, 4c) and the first and second linearly moving members include a groove (12a) defining a track into which the protrusion portions can be inserted and guided therewith, wherein the first and second linearly moving members and the first and second resilient members are fitted around the rod ends.

#### **Allowable Subject Matter**

Claims 3, 5, 8, 21 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In particular, Fujita and Tourville et al both disclose hinge devices including housings, defining at least two hinge shafts, two movable cam members and two spring members arranged to meet the limitations of applicant's base claim. Ko et al and Kuivas et al each disclose hinge structures useable within an electronic device, which may be used in combination to meet the limitations of applicant's base claim.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre' L. Jackson whose telephone number is (703) 605-4276. The examiner can normally be reached on Mon. - Fri. (10 am - 6 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy J. Swann can be reached on (703) 306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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